CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

MEMORANDUM

Supporting Document 10
Item No. 8

TO: **John Robertus**
Executive Officer

FROM: **Paul J. Richter, WRCE**
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

DATE: **November 4, 2004**

SUBJECT: **UNIVERSITY OF CALIFORNIA, SCRIPPS INSTITUTION OF OCEANOGRAPHY, SAN DIEGO COUNTY, TENTATIVE ORDER NO. R9-2004-0378**
ITEM NO. 8

The Regional Board has received three comment documents regarding the tentative Order. Document A and B were included in the first Agenda Package mailing as Supporting Document No. 6; and Document C is included in the Supplemental mailing as Document 11; and Comment letter D was included in the first agenda package as Supporting Document No. 7.

The following comment letters and documents from interested parties have been received.

A. Comment letter received from Mr. Tom Collins, Deputy Director, Administrative Affairs, Scripps Institution of Oceanography (SIO) dated October 27, 2004. This letter has 2 attachments, Attachment A, and Exhibit 1. The SIO cover letter noted that *Exhibit 1* to their comment letter represented preliminary scientific assessments and that the document was not commitments for actions nor should the scientific assessments be included in the tentative Order. Therefore, a response to the comments in *Exhibit 1* is not included in this memorandum.

B. Attachment A to SIO comment letter dated October 27, 2004.

C. Comment letter received from Mr. John J. Lormon, counsel for SIO, dated November 3, 2004. This comment letter included two attachments: 1) an e-mail from the City of San Diego to SIO, indicating that the sanitary sewer system that serves the SIO facility does not have the capacity to take additional discharges from the seawater system; and, 2) a summary of the chemical treatment procedures currently in place at the aquariums located at SIO. The attachments were intended as informational only and responses are not required.

This comment letter discussed the comments from Dominic Gregorio and reiterated the earlier comments from SIO. Therefore, a response to this comment letter was not prepared.

D. Comment document received from Dominic Gregorio, Environmental Scientist, Division of Water Quality, State Water Resources Control Board (State Board) dated October 26, 2004. Staff at the Regional Board asked Mr. Gregorio to review the tentative Order. The documents from Mr. Gregorio were sent via e-mail and included attachments and suggestions for modifications to the tentative Order. Only one document had comments, the other documents were submitted to clarify the Ocean Plan exception.

The identification of the comments in this memorandum attempted to follow the numbering regime in the comment documents. Brief paraphrases of the concerns listed in the letter and staff's response are provided below. Some of the concerns have been grouped into one comment. The original letters should be reviewed to be sure the reader understands the comment and to ensure that I have accurately summarized the comment.

A. SIO Cover Letter dated Octerber 27, 2004

Comment A1: **The tentative Order includes effluent limitations for water quality objectives listed in Table B of the Ocean Plan. The chemical concentrations have a 2:1 dilution factor for both seawater system discharges and seawater system discharges mixed with storm water discharges. Because SIO has only had to monitor 7 constituents in its past NPDES permits, there was no data effluent data for the vast majority of the Table B constituents in the discharge and none for the receiving waters. Scripps does not know if it will or can immediately achieve compliance with all the Table B objectives as of November 20, 2004. We request that the Regional Board not impose Table B effluent limitations immediately but rather that it continue the existing permit limitations and at the same time employ the reasonable potential analysis provision in the proposed 2004 amendment to Chapter III of the Ocean Plan. We also request that the proposed Ocean Plan reasonable potential analysis be used to develop the interim effluent limitations and that the tentative Order set a date for final effluent limitations for Table B and Table A requirements.**

Response A1: The State Board Ocean Plan exception requires compliance with the effluent limitations in the Ocean Plan. The exception does not include conditions to provide for interim effluent limitations. The State Board included time schedules (e.g. 6-months) for specific conditions. The State Board did not include a time schedule for compliance with Ocean Plan water quality standards or provisions. If the State Board had intended to provide SIO with additional time to comply with the Ocean Plan water quality standards, the State Board would have included a time period for

those conditions. The monitoring for the effluent limitations is required twice per year.

Comment A2: **Condition 14 of the exception and the tentative Order require that SIO monitor dry and wet weather discharges that are subject to effluent limitations. Until effluent data is developed and has been provided to and reviewed by the Regional Board, interim effluent limitations can be developed and the interim limitations should be specified for a time within SIO can achieve compliance the effluent limitations.**

Response A2: See Response A1 above.

Comment A3: **Finding 12 of the tentative Order recognizes that an advisory committee will define *natural water quality* and it will take time to develop the committee and definition. Because SIO is proscribed by the tentative from altering natural water quality, when such conditions have not been determined demonstrates the need for a period of time to determine what natural water quality conditions are and to come into compliance with this requirement.**

Response A3: The Ocean Plan exception requires the formations of an advisory committee to define *natural water quality* and requires that the discharge of waste not alter *natural water quality*. The tentative Order included both requirements.

Comment A4: **Within 6-months of adoption of the tentative Order (p. 13, Reports and Studies 3.b) SIO is required to submit a report evaluating the alternatives and associated costs, and the feasibility of such alternatives, to the seawater system discharges. The City of San Diego has informed SIO that SIO will not be allowed to divert treated seawater to the City's sanitary sewer system. The feasibility solution will require additional time before a preferred alternative is identified, funded and implemented.**

Response A4: The Ocean Plan exception requires SIO to submit the report within 6-months of the adoption of the tentative Order. The report required by the tentative Order is not limited to evaluating diversion of the seawater system to the sanitary sewer system. The report should evaluate a variety of alternatives to the waste discharges to the Ocean from SIO. If SIO needed additional time to develop the report, then this comment should have been made to the State Board and should have been reviewed during

the public comments, environmental review, and adoption of the State Board Ocean Plan Exception.

Comment A5: **The State Board conditions and the tentative Order require SIO to conduct dilution studies, fate and transport studies, and benthic studies. All of the study requirements demonstrate that SIO needs time to develop data and to assure that SIO is in compliance with final effluent limitations.**

Response A5: See Response B1 above. The State Board Ocean Plan exception requires compliance with the effluent limitations in the tentative Order. The studies and reports are also required by the State Board Ocean Plan exception.

B. Attachment A to SIO comment letter dated October 27, 2004

Fact Sheet comments

Comment B1: **The flow rate at SIO has been measured and is 1.25 million gallons per day (mgd).**

Response B1: The tentative Order and Fact Sheet shall be changed to the correct flow rate of 1.25 mgd.

Comment B2: **The seawater system discharge to Outfall 002 was eliminated in September 2004.**

Response B2: The tentative Order and Fact Sheet shall be changed to include the elimination of the seawater system discharge to Outfall 002 and that the discharges of storm water are still occurring from Outfall 002.

Comment B3: **Flow meters have been installed on Outfalls 001, 003, and 004b in September 2004. The flow rates from these Outfalls should be modified.**

Response B3: The Outfall flow rates in the tentative Order and Fact Sheet shall be changed.

Comment B4: **The Ocean Plan exception was applied for in November 2002.**

Response B4: The reference to application for the Ocean Plan exception will be changed to November 2002.

Comment B5: See cover letter. Request that current permit limitations be used until data is developed to allow for interim effluent limitations. New permit effluent limitations would apply after alternative treatments are in place.

Response B5: The effluent limitations are required by the State Board Ocean Plan exception. The monitoring requirements are minimal for the discharges at SIO, i.e. twice per year, once during dry weather and once during a storm water discharge.

Comment B6: Recommend the use of the bean clam, *Donax guildi*, as an alternative to the sand crab, *Emerita*, because the bean clam is more likely to be homogeneously distributed throughout the area of special biological significance (ASBS) and adjacent sandy beaches. A pilot study is needed to determine the species chosen for the bioaccumulation study have adequate spatial coverage for this particular application.

Response B6: The State Board Ocean Plan exception requires the use of the sand crab. The tentative Order does not prohibit SIO from using additional species or from conducting a pilot study for a bioaccumulation study.

Comment B7: See comments in cover letter. Requests that current permit limitations be used until data is developed to allow for *interim limitations* and new permit effluent limitations after alternative treatments are in place.

Response B7: The State Board Ocean Plan exception requires compliance with the water quality standards and provisions in the Ocean Plan. The State Board Ocean Plan exception does not provide for the Regional Board to develop interim permit effluent limitations. See Response B1 above.

Comment B8: a. Requests to use the end of the SIO Pier for collection of receiving water samples for safety and logistical reasons.
b. Requests that the receiving water samples be 4 grab samples during a 24-hour period.
c. Requests that sediment sample be a grab sample of surface sediment. d. What are the standards that will be used to compare sediment samples?
e. How will sediment data be used?

f. Will this data be used for determining natural water quality?

Response B8:

a. The end of the SIO Pier is considered to be too far from the surf zone area specified by the State Board Ocean Plan exception, especially during a high tide and small wave condition. The sampling of the receiving water should be near to the surf zone, thereby allowing an evaluation of the potential impacts to the receiving waters. The sampling of the receiving water may occur along the SIO Pier if the sampling location is within 5-meters seaward of the surf zone.
b. The monitoring for the receiving water will be changed to 4 grab samples during a 24-hour period that shall be combined as a single sample. However, the sampling for volatile organic chemicals shall be a single grab sample.
c. The monitoring for the sediment sampling will be modified to specify a surface sample.
d. The tentative Order does not have specifications or limitations for chemical concentrations in the sediment. The sediment quality data may be used by the advisory committee, the Regional Board, and the State Board when evaluating the natural water quality and receiving water conditions. The data may be used when SIO applies for a renewal of the Ocean Plan Exception and a renewal of its NPDES permit.
e. See d. above.
f. See d. above.

Comment B9: **The SIO Storm Water Management Plan/Program (SWMP) will be developed and submitted to the Regional Board 6-months after the adoption of the tentative Order. We requests that SIO be allowed 6-months to develop the SWMP before any 30-day report is due. The condition cannot be implemented until the SWMP is developed.**

Response B9: A change to the reporting requirement is not recommended. The commentor is combining two separate requirements. The 30-day report is not dependent on the development or the completion of the SWMP. The 30-day reporting requirement requires the determination by an advisory committee that the storm water discharges are causing or contributing to an alteration of natural water quality in the ASBS.

Comment B10: **NPDES rating. The maximum seawater system discharge flow rate should be changed to 1.25 mgd.**

Response B10: The flow rate will be changed to 1.25 mgd.

Tentative Order Comments

Comment B11: **Finding 2. The maximum seawater system discharge flow rate should be changed to 1.25 mgd.**

Response B11: The flow rate will be changed to 1.25 mgd.

Comment B12: **Finding 7. The maximum seawater system discharge flow rate should be changed to 1.25 mgd. The seawater system discharge from Outfall 002 has been eliminated.**

Response B12: The flow rate will be changed to 1.25 mgd, and the reference to the seawater system discharge from Outfall 002 will be eliminated.

Comment B13: **Finding 9. Flow meters were installed in September 2004. The seawater system discharges from each of the Outfalls should be revised as follows:**

- **Outfall 001: 0.470 mgd average, 0.700 mgd maximum**
- **Outfall 002: The seawater system discharge has been eliminated.**
- **Outfall 003: 0.140 mgd average, 0.200 mgd maximum, and when the Ring Tank Complex is in use 0.140 mgd average, 0.210 maximum**
- **Outfall 004a and 004b: 0.045 mgd average, 0.140 mgd maximum**

Response B13: The flow rates will be changed as noted.

Comment B14: **Finding 13. In the existing permit, Finding 12 of Order No. 99-83, the permit noted that copper concentrations in the intake water have exceeded the Ocean Plan limitations. SIO appreciates that the Ocean Plan effluent limitations shall be gross, not net. However, as with the current NPDES permit, the tentative Order should have a provision to consider the source of copper or other constituents in the effluent that may contribute to an exceedence of limitations**

Response B14: The Ocean Plan implementation for Table B effluent limitations applies to the gross, not net, concentrations in the discharges. If SIO has difficulties complying with the effluent limitations for copper, the Regional Board will evaluate the monitoring data and violations when they are reported.

Comment B15: **Prohibition 6. The Prohibition should be changed to the corrected maximum flow rate of 1.25 mgd.**

Response B15. The Prohibition will be changed to 1.25 mgd.

Comment B16: **Special Conditions #1. The Ocean Plan, Appendix II Minimum Levels are higher that the effluent limitations in the tentative Order, Tables 1-4. According to the Ocean Plan the effluent limitations, where applicable, in Tables 1-4 should be changed to the Minimum levels established by the Ocean Plan.**

From discussions with a marine analytical laboratory, it appears that the reporting limits for some of the constituents may also be greater than the effluent limitations, for example, Acrylonite, Chromium (hexevalent), total residual chlorine, and Cyanide. The Ocean Plan does not have established minimum levels for these constituents.

In Table 2, the Monthly Average for 2, 4-dinitrophenol and fluoranthene do not appear to be calculated as the other constituents. Our calculations show the concentrations to be 12 and 45 µg/L respectively.

Response B16: The State Board Ocean Plan exception requires compliance with the Ocean Plan water quality standards. The effluent limitations in Tables 1-4 shall not be changed to the Ocean Plan Minimum Levels. The Ocean Plan Minimum Levels will be reviewed when evaluating the monitoring data submitted for the SIO discharges.

The Regional Board will not establish minimum levels for these constituents. Compliance will be determined when analytical results indicate the concentrations are higher than the reported minimum level from the laboratory conducting the analyses.

The concentrations for 2, 4-dinitrophenol and fluoranthene will be changed as noted.

Comment B17: **Outfall 002 should not have mass loading limitations because it does not contain a discharge from the seawater system.**

Response B17: The State Board Ocean Plan exception requires monitoring of discharges including storm water discharges from Outfall 002. The Outfall will need to be monitored to characterize the discharges that occur during dry weather and during a storm event. Therefore, the mass loading limitations for Outfall 002 will not be deleted.

Comment B18: **Special Conditions #1. How does SIO remove 75% of suspended solids form influent and what is considered the influent stream?**

Response B18: The effluent limitation for suspended solids will be changed. The requirement for 75% removal will be deleted. Comments from the State Board recommended effluent limitations of 60 mg/L Average Monthly and 120 mg/L Maximum at Any Time. These effluent limitations shall be added to the tentative Order.

Comment B19: **Radioactive materials are not added to the seawater system discharges. The limitations in the Ocean Plan refer to Title 17, which in turn refers to 10 CFR 20. Table 2 in 10 CFR 20 lists effluent limitations typically derived for sewage and industrial discharges with relatively low background activity. For effluent mixtures with an unknown compositions of nuclides, the most common way to show compliance is to do a gross analysis of activity.**

To analyze each nuclide distinctly will cost $1,500 to $2,000 per sample. It cost about $200 per sample to do a gross analysis.

The nuclides commonly used at UCSD are beta emitter C-14, H-3, P-32, and S-35. We propose to analyze for gross beta activity and attribute all of the activity to C-14, which has the lowest limit in Table 2 of 10 CFR 20 for the common constituents used at UCSD. By meeting the C-14 limitations, the limitations for each of the commonly used nuclides would be meet.

Response B19: The submittal of gross alpha and gross beta analyses is acceptable. The MRP will be changed to allow a gross alpha and gross beta analyses.

Comment B20: **Bacterial Characteristics 2. The reference to kelp beds is not needed, since the nearest kelp beds are 2 kilometers away.**

Response B20: A change to the Bacterial Characteristics is not needed. The reference to kelp beds is from the Ocean Plan.

Comment B21: **Condition 2. The *for* should be changed to *nor*.**

Response B21: The change shall be made as noted.

Comment B22: **Reports and Studies 3.f. Recommend the use of the bean clam, *Donax guildi*, as an alternative to the sand crab, *Emerita*, because the bean**

clam is more likely to be homogeneously distributed throughout the area of special biological significance (ASBS) and adjacent sandy beaches. A pilot study is needed to determine the species chosen for the bioaccumulation study have adequate spatial coverage for this particular application.

Response B22: See Response C6 above

Comment B23: **Reports and Studies 3.g. The SIO Storm Water Management Plan/Program (SWMP) will be developed and submitted to the Regional Board 6-months after the adoption of the tentative Order. We requests that SIO be allowed 6-months to develop the SWMP before any 30-day report is due. The condition cannot be implemented until the SWMP is developed.**

Response B23: See Response B9 above.

Comment B24: **Report and Studies 3.d.x. The condition should provide for both a reduction in volume and/or a reduction in pollutants.**

Response B24: The condition will be changed to allow a reduction in volume or a reduction in pollutants.

Comment B25: **Provision 10. The Provision allows the Regional Board to modify or revoke the tentative Order if the continued discharge may cause *unreasonable degradation of the marine environment*. Should this be changed to *unreasonable alteration of natural water quality conditions*?**

Response B25: The terminology does not need to be changed. The *marine environment* term includes the *natural water quality conditions*.

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Comment B26: **Monitoring Provision A.2. Has the reference list for the installation, calibration and operation of flow measuring devices been updated?**

Response B26: The reference list has not been updated. The Provision allows that the documents can be used, not must be used.

Comment B27: **Effluent Monitoring B.1. The seawater system discharge from Outfall 002 has been eliminated.**

Response B27: Comment noted. See Response C17.

Comment B28: **Effluent Monitoring B.1. The condition states that the monitoring shall be conducted at the discharge point to the beach. To facilitate the monitoring, SIO would like to add *or from the discharge pipe downstream from where the last effluent flow joins the discharge pipe* so monitoring stations and associated equipment can be installed off of the beach.**

Response B28: The monitoring conditions will be changed to allow monitoring off of the beach and at a location where additional pollutants or additional waste discharges cannot be added to the discharge.

Comment B29: **The requirement to sample the Outfalls during a storm event, especially during extreme high tide may create an unsafe work practice. We recommend that the requirement to sample during a storm discharge be qualified to those times when the discharger judges it to be safe to conduct such monitoring.**

Response B29: The requirement to take a storm water discharge sample will be qualified to provide for a safe work place and still be representative of a storm water discharge.

Comment B30: **a. The limitations for 2, 4-dinitrophenol and fluoranthene do not appear to be calculated as the other constituents. Our calculations show the concentrations to be 12 and 45 µg/L respectively.**

b. To preserve the integrity of volatile organic samples, we request that a single grab sample be collected for volatile organic compounds instead of a composite sample (compounds listed in comment).

Response B30: **a.** The concentrations for 2, 4-dinitrophenol and fluoranthene will be changed as noted.

b. The monitoring requirement will be changed to require a grab sample for the volatile organics listed in your comment.

Comment B31: **Effluent Monitoring B.2. a. The condition in the exception required bacterial sampling for Outfall 003 when the Ring Tank is in use. The tentative monitoring requires sampling for bacteria when Outfall 003 is in use. Since Outfall 003 always has a discharge of seawater system water, the requirement should be change to when Ring Tank is in use.**

b. The Ocean Plan limitations are for the receiving water. What will the Outfall bacteria levels be compared to?

Response B31: a. The condition will be changed to require sampling when the Ring Tank is in use.

b. The levels will be used to evaluate the discharge and may be used to evaluate any potential bacterial violations in the receiving waters.

Comment B32. **Effluent Monitoring B.2. The seawater system discharge has been eliminated from Outfall 002. The monitoring requirement should be changed to eliminate Outfall 002 from the combined flow weighted discharge sampling.**

Response B32: Comment noted. See Response C17.

Comment B33: **SIO requests that the receiving water sample consist of 4 grab samples collected during a 24-hour period rather than a composite sample so the results can be compared to ocean condition.**

Response B33: The monitoring for receiving water will be changed to 4-grab samples and to 1-grab sample for volatile organics.

Comment B34: **Receiving Water, Sediment, and Ocean Plan Bacterial Monitoring C.1. a. What analyses are to be used for sediment? For example, the analyses in Table 4 would not apply to sediment. The requirement should specify a grab sample of surface sediment.**
b. What will the results be compared to? How will the data be used? Will this data be used for determining natural water quality?
c. Recommend combining the sediment sampling with the benthic marine life survey.
d. Recommend that the sediment concentration be compared to concentrations throughout the Southern California Bight, similar to monitoring programs for municipal dischargers.

Response B34:

a. The analysis should be a method appropriate for a sediment sampling analysis. The tentative Order will be changed to a grab sample for the sediment monitoring.

b. The results will be used to evaluate the sediment and any potential impacts from the discharges. The data may be compared to any reasonable data set available. The advisory committee may use the data to evaluate natural water quality or to characterize the ASBS. The data will be available to evaluate to Ocean Plan exception and any application submitted by SIO for renewal of the Ocean Plan exception.

c. Selecting a location that coincides with the benthic survey is acceptable. SIO may want to include the location and procedures with its benthic survey proposal. However, please note that the sediment monitoring is required twice per year while the benthic survey is required once during the 5-year NPDES permit.

d. The recommendation is noted.

Comment B35:

Receiving Water, Sediment, and Ocean Plan Bacterial Monitoring C.3. Ocean Plan Bacterial Water Quality Objectives. See Exhibit 1. Letter regarding bacterial monitoring. a. Recommend SIO use data collected by the County during their regular monitoring conducted at SIO Pier and El Paso Grande (approximately same locations as suggested station S3 and S1) and collect samples during the months that the County does not conduct this monitoring (thereby supplying year-round sampling). The resources saved could be used to investigate the patterns of bacterial activity in a more thorough manner as described below.

b. Recommend that SIO analyze bacteria twice a year (dry weather and wet weather) when analyzing samples from Outfalls 001, 003, 004a and 004b, and the receiving water as described in the tentative Order.

c. Once during the 5-year permit cycle, SIO will conduct an intensive bacterial study during three separate time periods (dry weather, wet weather, and when mammals are in the Ring Tank). Each study would consist of 3 intensive 3-5 day sampling periods. Several daily samples could be taken from outfall discharges, beach sediments, and surf zone (S1-S5), and nearshore (N1-N5), including at least one station outside the zone of influence pf the outfalls. This type of study, conducted once per permit cycle, would provide more information on potential risks, sources, and variability than weekly or monthly samples that cannot resolve natural or human induced patterns. It would also help inform the design of future monitoring to best fit the conditions of the area. If frequent exceedences are found that appear to be connected to SIO discharges, then DNA analysis could be performed as well to determine what the host sources are (e.g. sea birds, marine mammals, human sewage, etc.).

Response B35: **a.** The SIO monitoring reports may include bacterial monitoring data conducted by the County in the SIO monitoring report provided the monitoring done by the County complies with the monitoring requirements in the tentative Order.
b. The proposal by SIO to conduct a different bacterial monitoring regime does not achieve the intent of the Ocean Plan exception for compliance with the Ocean Plan bacterial water quality standard. The bacterial monitoring regime in the tentative Order is to determine compliance with the Ocean Plan bacterial water quality standards.
c. The bacterial monitoring required by the tentative MRP provides significantly more data during the 5-year permit cycle. A one time study will not fully characterize the potential impacts from the discharges at SIO to an ASBS.

Comment B36: **Receiving Water, Sediment, and Ocean Plan Bacterial Monitoring C.3. Ocean Plan Bacterial Water Quality Objectives. The Ocean Plan limitations for bacteria refer to receiving water. What will effluent bacterial results be compared to?**

Response B36: The effluent bacterial monitoring will be used to evaluate the condition of the discharges. The effluent monitoring data when compared with receiving water bacterial monitoring data may provide information regarding any potential bacterial impacts to the receiving from the discharges.

Comment B37: **Table 5. The due date for the semi-annual report for *January through June* should be changed to August 1.**

Response B37: The due date change will be made as noted.

Comment B38: **Logs and Operational Information D.2. The requirement to estimate the daily flow rate from Outfall 002 should be removed because the seawater system flow has been eliminated.**

Response B38: The monitoring of Outfall 002 is required by the Ocean Plan exception and includes non-storm water and storm water discharges. The requirement to estimate the daily flow rate from Outfall 002 will not be changed. The daily flow rate data will help characterize any dry weather flow and storm water flow to the ASBS.

Comment B39: **Endnote 2. To preserve the integrity of the volatile organic samples, UCSD requests that a single grab sample be collected instead of a 24-hour composite.**

Response B39: The requirement for composite samples for volatile organic compounds will be changed to require a single grab sample.

D. Comment Letter from Mr. Dominic Gregorio, State Board, DWQ, dated October 26, 2004

This comment letter was sent in response to the Regional Board request that the State Board review the tentative Order to ensure that the tentative Order accurately includes the conditions required by the Ocean Plan exception. Although the Regional Board is not required to provide a response to the State Board comments, the following responses are provided because changes were made to the tentative Order based upon their comments.

Comment D1: **I suggest removing the quote from the Ocean Plan relative to suspended solids and instead requiring the 60 and 120 mg/L standards as Monthly Average and Maximum at any time, respectively. The Table A of the Ocean Plan is really designed for POTWs and therefore refers to "influent stream." This is obviously not relevant to SIO, unless we consider the ocean water as an influent stream. The 60 mg/L limit is a monthly average, and the 120 mg/L maximum level was calculated based on a log normal distribution and applying the USEPA TSD defaults.**

Response D1: The suggested limitations for total suspended solids will be changed as noted.

Comment D2: **I suggest removing the third column on Tables 1-4 in the MRP. The effluent limits are already given in the permit and placing only the 6-Month Median (as in Table 1) or the Monthly Average (as in Tables 2-4) may cause confusion, possibly leading the discharger to believe that only those limits apply to the monitoring data. All of the effluent limits apply (instantaneous maximum, daily maximum, 6-month median, monthly average, and weekly average) regardless of how these tables in the MRP are presented. Also, specifically for Table 4, I suggest requiring that the samples from Outfall 004b be collected during the filter backwash cycle.**

Response D2: The suggested changes to the tables in the MRP will be changed as noted. The filter backwash cycle depends on the quality of the intake water and the operation of the filter. The suggestion to collect a sample during backwash

will be added to the monitoring requirement. However, the qualifying statement *if possible* will also be included in the monitoring requirement. The qualifying statement will allow for sampling at times when the backwash may not be operating.

Comment D3: **I suggest that for bacteria samples that they be collected from Outfall 004b during the filter backwash cycle, which is the worst case situation.**

Response D3: The suggestion to collect a sample during backwash will be added to the monitoring requirement. However, the qualifying statement *if possible* will also be included in the monitoring requirement. The qualifying statement will allow for sampling at times when the backwash may not be operating.

Comment D4: **For sediment monitoring, I suggest giving the specific reference for the amphipod acute toxicity test. Also, for bacteria sampling in receiving water, I believe that two sample locations in the surf zone (five times per month) and two sample locations in the nearshore waters (once per month) are adequate in terms of complying with the Ocean Plan. Also, Samples should be collected at the same time as the filter backwash cycle (at 004b).**

Response D4: The suggestion to give the specific reference for amphipod acute toxicity test will be included in the tentative Order. The bacteria sampling monitoring will not be changed. The bacterial monitoring regime in the tentative Order is to determine compliance with the Ocean Plan bacterial water quality standards. The suggestion to collect a sample during backwash will be added to the monitoring requirement. However, the qualifying statement *if possible* will also be included in the monitoring requirement. The qualifying statement will allow for sampling at times when the backwash may not be operating.